B. G. Constantelos, Chief Engineering Unit

Glenn D. Pratt, Chief Permit Assistance Section



The following technical assistance is requested as part of developmental work for several enforcement actions. Questions should be directed to Dennis Hatfield.

- 1. Sediments in the Black River near Elyria, Ohio, are badly contaminated with heavy metals and other pollutants. Data were sent to Pete Redmon on February 2, 1976. Three questions regarding possible dredging of these sediments need to be addressed:
  - (1) Will acute damage to downstream aquatic life occur if the sediments are dredged?
  - (2) Will the sediment contaminants eventually reach Lake Erie, either through solution or scouring?
  - (3) Can a normal indigenous aquatic bottom fauna system establish itself in the contaminated sediments?
- 2. What is the 96-hour  $LC_{50}$  for each of the following materials, in a typical small stream in central Ohio? Also, what other data are available regarding aquatic toxicity of these materials?
  - (1) monochlorobenzene

(3) trichlorobenzene

(2) p-dichlorobenzene

- (4) tetrachlorobenzene
- 3. What pH fluctuation can species typical of a warm water fishery tolerate? Assume a constant temperature during the fluctuation, a temperature range of  $0^{\circ}$ C to  $35^{\circ}$ C. TDS of 2000-3500 mg/l, hardness of 500 mg/l, two time frames for the fluctuations (in the range of minutes and in the range of hours), and a total pH range of 4.0-11.0.

Response to #1 is needed by February 20, 1976; #2 by March 5, 1976; and #3 by February 27, 1976.

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B. G. Constantelos

cc: Bryson Redmon Hatfield

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